# iPAQ Repair and Parts iPhone Black Rear Case Replacement Guide

#### Introduction

Before we start, I must stress to you the importance of having patience and dedication with this procedure, as the iPhone is one of the hardest mobile devices to carry out repairs on. This is due to the way the phone is constructed and secured together by Apple making it difficult to open up.

This procedure is indeed possible with patience and is well worth the finished result, making the iPhone look sleeker and more impressive. There are many guides on the internet for either removing the iPhone casing or replacing the rear case, but our aim is to guide you through the whole repair process from removing your old rear case, right through to the completion of fitting the black rear case to your iPhone.

### **Required Tools:**

iPhone Case Opening Tool (available here in the iPhone parts section of the website)
Mini Crosshead Screwdriver (available here in the tools section of the website)
A Replacement Black Metal iPhone Case (available here in the iPhone parts section of the website)
A Heat Gun
A Heat Proof Mat or Floor
Safety Gear such as Goggles and Heatproof Gloves
Needle Nosed Pliers
Superglue Gel
Nail Varnish Remover

## Stage One: Antenna Cover Removal

First, Turn the iPhone off, we do not recommend attempting this repair whilst the phone is on. Turn over the phone, so the apple logo is facing you, and start inserting the opening tool into the small gap between the metal case and the antenna cover and gently start to prize the antenna casing off the phone. This is a lot more difficult than it sounds, but by gently running the tool along the edge of the plastic you will be able to make a small gap, enough for you to prize the case off gradually.



Please note that you will need the antenna case again so do this carefully and make sure you don't damage the plastic.

### Stage Two: Rear Metal Case Removal

Now that you have removed the antenna cover, you are ready to remove the metal case. There are three screws holding the case on to the phones frame, which need to be removed before we start, keep the screws safe as you will need them for re-assembly.



As with the antenna cover, start by running the opening tool along the edge of the phone, between the case and the chrome bezel until they start to separate, then gradually increase the gap between the case and bezel until the case comes off.



Try not to damage any inner parts of the metal casing as you will need these later. Once you are done, you should have something looking like the picture on the bottom right.

### Stage 3: Removing Items from the Casing

The first thing you need to do is remove all the screws from the headphone jack circuit with your small crosshead screwdriver, there are ten screws in all, and they are incredibly small, so take note of where you have taken them from as they are all different sizes, and put them somewhere safe. The headphone jack flexible circuit should lift off with minimal effort, although you should still treat it carefully.

The next stage is to remove the camera lens cap; this should prize off with a bit of leverage, but as usual, do this carefully as the small silver mounting ring can come off, causing difficulty when re-assembling.

Removing the side buttons are a much simpler affair. Take the needle nosed pliers and twist the casing enough for the buttons to just fall out.



Now the fun bit. Make sure you do this part in a well ventilated area, as we will be using the heat gun to loosen the glue that holds all the metal parts to the case.

Start off by making note of the location of all the metal parts as you will need to glue them into your shiny new black case with a high degree of accuracy and make sure there are no plastic parts left that you have missed, as they will soon be melted! Then using the heat gun, start heating the metal case in short 30 second bursts in the locations of the inner pieces, we found a relative temperature of 250 – 300 degrees centigrade will loosen the parts quickly and efficiently.



Generally the metal Apple logo will be the first to drop off, followed by the screw bushing at the base, then the outer parts of the frame.



Some parts around the edge may take a tiny bit of prizing off, which is made all the more difficult by the case being hot, wear adequate protection and use the pliers to hold the case, whilst you carefully use the screwdriver to lift the part off.



Do not under any circumstance allow these parts to bend or bow, as it will make it extremely difficult to re-attach them. Once all the parts are removed, you should either have seven, (Apple logo, top frame with sim card slot, a piece of flat metal with the centre screw bushing, another piece of flat metal that goes under the sim card frame, the head phone jack mount, left frame and right frame) eight or nine (left and right clips) depending on how careful you were, allow them to cool off before you start anything else.

N.B If you have ended up with eight or nine parts then do not worry, once the parts have cooled, you can glue the two small side clips back on to the left or right frame.

## Stage 4: Reassembly

Now it's time to start gluing parts onto your new rear case. Begin with the Apple logo, as this is really easy to put back correctly and will give you a good idea with how much glue you need to use to get a good bond.



We used superglue gel, as this gives you a small bit of extra time to position the parts before they are bonded, also by using superglue, you will be able to clean off any excess glue with nail varnish remover.

Once the glue has set, start adding a piece at a time; Start with the top part with the sim card hole, followed by the right frame, the silent switch and volume buttons (do not glue these!), the left frame, the flat metal parts, and finally the headphone jack mount.



It is best to be as accurate as possible to avoid any nasty surprises when putting the case on to the phone.

Add the camera lens and headphone jack circuit once the glue has set, using any diagrams or photos taken earlier to correctly re-assemble.



Reconnect the headphone circuit to the phone before putting the case back on in order to test the buttons by powering the phone on, then switching the silent button and adjusting the volume, making sure that each switch works correctly.

Then fit the rear case back onto the iPhone, which will easily click back into place, screw the three mounting screws in, and slide the antenna cover back on.



Voila! You have successfully replaced your iPhone rear case, with a brand new sleek black one, test the iPhone to make sure all is in order, and then show it off to friends and family.

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